Memorandum

Date:

May 16, 2007

To:

Ivan Paulsen

Department of Fish and Game

Post Office Box 1858 Portola, California 96122

From:

Department of Water Resources

Subject:

Lake Davis Creel Census-2000

This memorandum summarizes and documents a survey of fishing at Lake Davis, Plumas County in 2000 by employees of the Department of Fish and Game. The survey was conducted to monitor angling use and catch following rediscovery of illegally introduced northern pike in the lake in 1999.

DFG Fish and Wildlife Scientific Aid Terry Banka, assisted by Sean Henderson, John McMorrow, and Amber Rossi, conducted the census of anglers at various access sites around the lake (See USFS Description and Map of Lake Davis Recreation Area.). They surveyed on 30 days of the 201-day Sierra Trout Season, April 29 to November 15 (Table 1). Although Lake Davis can be legally fished all year, angling use in winter and early spring is greatly reduced by inclement weather and ice and snow conditions on and around the lake.

During the survey period, 1,556 anglers were interviewed. They had fished 5,263 hours with an observed catch (fish kept) of 1,402 rainbow trout, 9 brown trout, and one northern pike. In addition, 539 rainbow trout were reported to have been caught and released (Table 2). About 62 percent of the shore anglers observed on the survey days were censused and about 19 percent of the boat anglers.

Boat anglers totaled 692 and fished 2,936.5 hours with a recorded catch of 881 rainbow trout, 4 brown trout, and one northern pike. Boat anglers reported catching and releasing an additional 476 rainbow trout. Six float tube anglers were censused and had fished a total of 22 hours. They reported catching and releasing 15 rainbow trout.

Shore anglers totaled 858 and fished 2,304.5 hours with a recorded catch of 521 rainbow trout and 5 brown trout. They also reported catching and releasing 48 additional rainbow trout.

About 60 percent of the anglers interviewed at Lake Davis said they lived in California and the remaining 40 percent were mostly from Nevada with few from other states.

Angler success varied widely among the several locations censused around the lake. Ninety-five percent of the boat anglers interviewed during 2000 were at Lightning Tree and Honker Cove (Table 3). Since boat anglers can fish anywhere on the lake the catch rate for any specific area is not very meaningful. The highest catch rates for shore anglers were at Fairview Point and Eagle Point (Table 4).

Lake Davis Recreation Area

Beckwourth Ranger District

Lake Davis is located seven miles north of Portola, California. This lake was created in 1967 for recreational opportunities. The Lake Davis Recreation Area offers a wide variety of summer outdoor experiences including: camping, picnicking, fishing, hunting, boating, mountain biking, swimming and wildlife viewing. Waterskiing and jet skis are not permitted. Frequent strong winds can cause the lake to become very hazardous for small craft. In the winter, ice fishing, snowmobiling and cross-country skiing are favored activities.



Camping

A concessionaire manages three campgrounds around Lake Davis. Grizzly, Grasshopper Flat and

Lightning Tree Campgrounds have approximately 144 family camping sites, 21 double sites and 1 group site. Campsites may be reserved through Reserve USA (1-877-444-6777 or on-line at www. ReserveUSA.com).

Grizzly and Grasshopper Campgrounds have piped water and flush toilets. Coin-operated showers are available at Honker Cove Boat Ramp. Trailers of up to 35 feet can be accommodated. No hookups are provided. Facilities are usually open from late April through late October. Lightning Tree Campground has vault toilets and is open year-round except when closed by snow.



Fishing

There are twelve fishing accesses on Lake Davis. Some have toilets and picnic tables are available at Coot

Bay Fishing Access. Fishing is regulated by the California Department of Fish and Game with a five trout limit and tributary restrictions. If any of the invasive species Northern Pike are caught immediately cut off its head. Below Lake Davis, almost three miles of Big Grizzly Creek is open to fishing for day use on a public access strip. Native and stocked trout occur in the lake.

Varieties include Rainbow, German Brown and Eagle Lake Trout as well as Largemouth Bass and Brown Bullhead.



Boat Launching

Camp Five, Honker Cove, Mallard Cove, and Lightning Tree Boat Ramps all have paved launching

ramps, floating boat docks, toilets and paved parking lots. Camp Five Boat Ramp also has a universally accessible Fishing Levee 100 feet long for deeper water fishing.



Hunting

Mule deer, black-tailed deer, waterfowl, quail, and some small game may be hunted in-season in

the Lake Davis Recreation Area. The California Department of Fish and Game regulates hunting seasons and permits. Discharging a firearm within 150 yards of a campsite, across or on a Forest road or body of water is prohibited.



Area Interests

Smith Peak Lookout, located about seven miles southwest of the dam, provides a good view of the lake

and an opportunity to learn about the job of a fire lookout. It is operated full time during fire season and visitors are welcome. Lake Davis is also home to several interesting species of birds. Eagles and osprey can be seen at different times of the year, as well as hawks and owls.



Supplies

Supplies can be purchased in the town of Portola, seven miles south of Lake Davis.



Drinking Water

Only water from developed recreation sites is maintained for safe drinking. Open water sources are easily

contaminated by human or animal waste. Water from springs, lakes, and streams should be properly treated before drinking.





Lake Davis Recreation Area

In Case of Emergency
Fire / Medical / Sheriff:

Call 911

Plumas National Forest

A pay telephone is located in Grasshopper Flat Campground

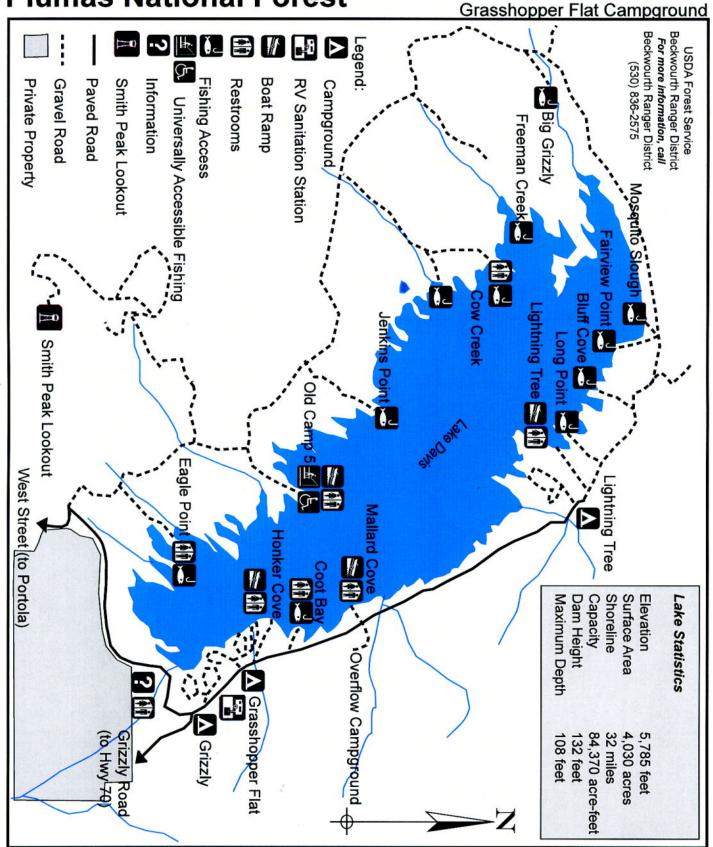


TABLE 1. 2000 RECREAT	ION SEAS	ON STRATA		
Portion of Angling Season	Days in Stratum	Anglers Interviewed	Days Surveyed	Vehicle Counts
April 29-30 (Opening Weekend)	2	142	2	2
May 27-29 (Memorial Day Weekend)	3	168	2	2
May - June Weekends	14	205	3	3
May - June Weekdays	44	259	. 7	7
July - August Weekends	16	263	4	4
July - August Weekdays	43	176	5	4
September-October-November WE	21	125	2	2
September-October-November WD	51	71	2	3
July 4 and Labor Day Weekends	7	147	3	3
Totals for Season	201	1556	30	30
One interview conducted on each of two Columbus Day (October 9) inc	o additional	al days in Stra	ata VII and	VIII.
Surveyors: Terry Banka - 24 days Sean Henderson - 6 days John McMorrow - 1 day				
	Portion of Angling Season April 29-30 (Opening Weekend) May 27-29 (Memorial Day Weekend) May - June Weekends May - June Weekdays July - August Weekends July - August Weekdays September-October-November WE September-October-November WD July 4 and Labor Day Weekends Totals for Season One interview conducted on each of two Columbus Day (October 9) incomparison of the Surveyors: Terry Banka - 24 days Sean Henderson - 6 days	Portion of Angling Season Days in Stratum April 29-30 (Opening Weekend) May 27-29 (Memorial Day Weekend) May - June Weekends July - August Weekends July - August Weekdays September-October-November WE September-October-November WD July 4 and Labor Day Weekends Totals for Season One interview conducted on each of two additions Columbus Day (October 9) included in Sturveyors: Terry Banka - 24 days Sean Henderson - 6 days	Portion of Angling Season Days in Anglers Stratum Interviewed April 29-30 (Opening Weekend) 2 142 May 27-29 (Memorial Day Weekend) 3 168 May - June Weekends 14 205 May - June Weekdays 44 259 July - August Weekends 16 263 July - August Weekdays 43 176 September-October-November WE 21 125 September-October-November WD 51 71 July 4 and Labor Day Weekends 7 147 Totals for Season 201 1556 One interview conducted on each of two additional days in Straton Columbus Day (October 9) included in Stratum VII Surveyors: Terry Banka - 24 days Sean Henderson - 6 days	Stratum Interviewed Surveyed

	Anglers	Hours		Brown	Kept Trout	Rainbow	All trout
	Interviewed	Fished	Trout Kept	Trout Kept	Catch/Hr	Trout C&R	Catch/H
Boat Anglers	692	2,936.50	881	4	0.301	476	0.46
Shore Anglers	858	2,304.50	521	5	0.228	48	0.24
Float Tube Anglers	6	22.00	0	0	0.000	15	0.682
All Anglers	1,556	5,263.00	1,402	9	0.268	539	0.37
TABLE 3. CATCH	OF TROUT	BY BOAT	ANGLERS A	Γ LAKE DAV	IS BY CENSI	JS LOCATIO	N, 2000
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Location	Anglers Interviewed	Hours Fished	Rainbow Trout Kept	Brown Trout Kept	Kept Trout Catch/Hr	Rainbow Trout C&R	All Trout Catch/Hr
	9	23.00				9	
Miscellaneous 1/	9	23.00	5	0	0.217	9	0.609
Lightning Tree	133	640.50	222	0	0.347	115	0.526
Honker Cove	529	2,204.00	640	4	0.292	351	0.45
Camp 5	13	46.50	8	0	0.172	14	0.473
Coot Bay	5	13.50	4	0	0.296	1	0.370
Mallard Cove	9	31.00	2	0	0.065	1	0.097
Totals	698	2,958.50	881	4	0.299	491	0.46
1/ Mosquito Slough,	Cow Creek, G	rasshoppe	r Flat.				
TABLE 4. CATCH	OF TROUT	SY SHORE	ANGLERS A	T LAKE DAY	VIS BY CENS	US LOCATI	ON, 2000
	A 1	Harries	Rainbow	December	Mant Trans	Delaham	All T
Location	Anglers Interviewed	Hours Fished	Trout Kept	Brown Trout Kept	Kept Trout Catch/Hr	Rainbow Trout C&R	All Trout Catch/Hr
Fairview Point	59	163.75	68	0	0.415	0	0.415
Eagle Point	82	226.00	79	0	0.350	0	0.350
Mosquito Slough	7	18.00	5	0	0.278	0	0.278
Mallard Cove	397	1,038.50	224	3	0.219	35	0.252
Honker Cove	195	581.75	121	1	0.210	11	0.229
Coot Bay	76	166.00	16		0.102	2	0.114
Camp 5	28	62.50	7	0	0.112	0	0.112
Miscellaneous 1/	14	48.00	1	0	0.021	0	0.02
Totals	858	2,304.50	521	. 5	0.228	48	0.24

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The mean total length of 914 measured rainbow trout was 15 inches with a range of 10.2 to 22.0 inches (Figure 1). The mean total length of 9 measured brown trout was 17.9 inches with a range of 16.0 to 20.2 inches. Early in the season trout were measured to the nearest one inch, later measurements were to the nearest 0.1 inch, so these lengths are not exact. Converted to the nearest 0.5 millimeter for comparison with subsequent surveys, the mean length of 914 rainbow trout was 380 mm (260 to 560 mm) and the mean length of 9 brown trout was 455 mm (405-515 mm).

During 2000, DFG planted 60,000 catchable-sized Eagle Lake rainbow trout plus 100 rainbow trout broodstock, and 1,100 fingerling brown trout in Lake Davis between May 25 and August 12, 2000 (Table 5).

Three times each survey day, the census clerks also counted boat trailers, vehicles with cartop boats, other vehicles, and shore anglers at Coot Bay, Honker Cove, Mallard Cove, and Lightning Tree boat ramps. This information was used to estimate boat and shore fishing use and total catch for the 201-day season. These should be considered minimal estimates, because some lightly used areas were not regularly counted and some boat trailers and shore anglers were at locations (such as campsites) not readily visible to the census clerks. Virtually all boating use at Lake Davis is for fishing since waterskiing and related boating recreation is not permitted.

About 85 percent of the counted vehicles were at Honker cove and Lightning Tree boat ramps in 2000, with much smaller percentages at Mallard Cove and Coot Bay (Table 6). Nearly 91 percent of the boats were trailered boats and 9 percent cartop boats. The vehicle counts provided a slightly different picture of angler origin (residence) than the angler interviews. About 65 percent of the vehicles had California license plates, and the remaining 35 percent were from Nevada with few from other states.

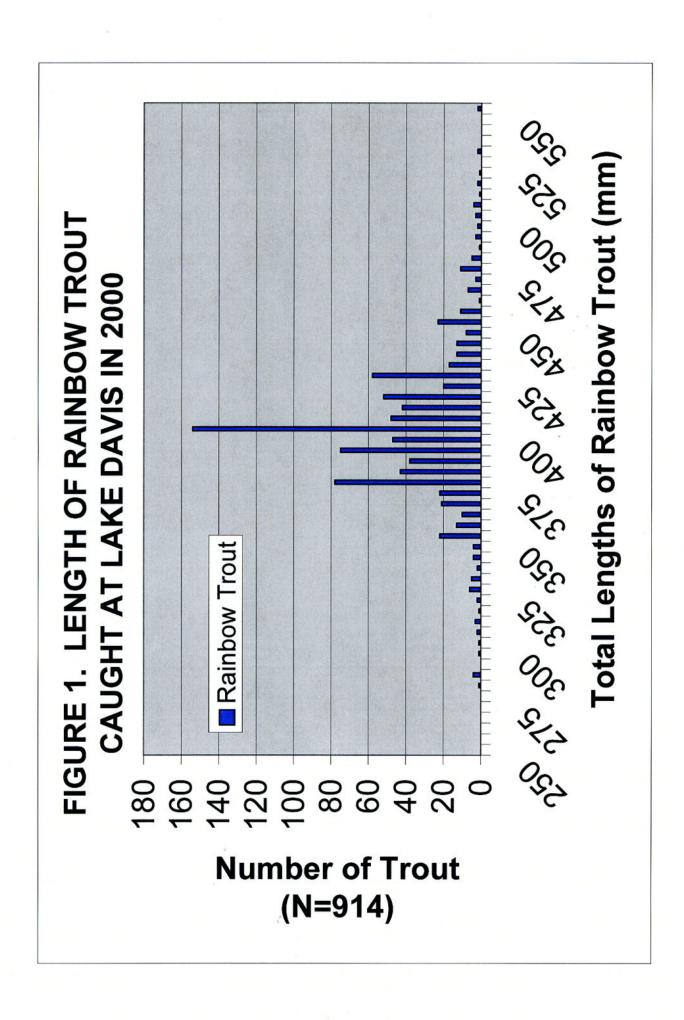
Estimated boat fishing totaled 90,000 hours (confidence interval ± 19,000) with an estimated catch of 27,000 trout (0.30 trout/hour). Shore fishing totaled 31,000 (confidence interval ± 7,000) with an estimated catch of 7,400 trout (0.24 trout/hour). Anglers reported they caught and released an estimated 13,600 additional trout (Table 7). Interviews of anglers who had finished fishing for the day provided information on the average length of a completed angler-day, which allowed calculation of angler-days and trout caught per angler-day.

If you have any questions or need additional information, you may contact me at (530) 529-7393.

Ralph N. Hinton Retired Annuitant

cc: (See attached list)

alph V Hantos



te 2000 2000 2000 2000 2000 2000 2000 20	8,400 9,200 8,925 9,200 7,350 8,925 8,000 60,000	4,000 4,000 4,250 4,000 3,500 4,250	2.1 2.3 2.1 2.3 2.1 2.3 2.1	Ramp Honker Cove Lightning Tre Mallard Cove Coot Bay Total	e	55% 30% 12% 3%
2000 2000 2000 2000 2000 2000	9,200 8,925 9,200 7,350 8,925 8,000	4,000 4,250 4,000 3,500 4,250	2.3 2.1 2.3 2.1	Lightning Tre Mallard Cove Coot Bay	e	30% 12% 3%
2000 2000 2000 2000 2000 2000	9,200 8,925 9,200 7,350 8,925 8,000	4,000 4,250 4,000 3,500 4,250	2.3 2.1 2.3 2.1	Lightning Tre Mallard Cove Coot Bay	e	30% 12% 3%
2000 2000 2000 2000 2000	8,925 9,200 7,350 8,925 8,000	4,250 4,000 3,500 4,250	2.1 2.3 2.1	Mallard Cove Coot Bay		12% 3%
2000 2000 2000 2000	9,200 7,350 8,925 8,000	4,000 3,500 4,250	2.3 2.1	Coot Bay		3%
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		4.000	2.0			
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ated E	Est. Trout	Catch per	Length of	Estimated	Catch per	Estimated
r-Hrs	Caught	Angler-Hour	Angler-Day	Angler-days	Angler-Day	Trout C&R
0,000	27,000	0.300	4.29	21,000	1.286	13,000
,000	7,400	0.239	3.37	9,200	0.804	600
,000	34,400	0.284	4.16	30,200	1.139	13,600
	ated r-Hrs 0,000 1,000	ated Est. Trout r-Hrs Caught 0,000 27,000 1,000 7,400 1,000 34,400	ated Est. Trout Catch per r-Hrs Caught Angler-Hour 0,000 27,000 0.300	ated Est. Trout Catch per Length of r-Hrs Caught Angler-Hour Angler-Day 0,000 27,000 0.300 4.29 0,000 7,400 0.239 3.37 0,000 34,400 0.284 4.16	ated Est. Trout Catch per Length of r-Hrs Caught Angler-Hour Angler-Day Angler-days 0,000 27,000 0.300 4.29 21,000 1,000 7,400 0.239 3.37 9,200 1,000 34,400 0.284 4.16 30,200	ated Est. Trout Catch per Length of Caught Angler-Hour Angler-Day Angler-days Angler-Day 0,000 27,000 0.300 4.29 21,000 1.286 0,000 7,400 0.239 3.37 9,200 0.804 0,000 34,400 0.284 4.16 30,200 1.139

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